

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Application Number	10/627,828
Filing Date	July 25, 2003
First Named Inventor	Ronald D. Blum
Art Unit	2873
Examiner Name	Unassigned
Attorney Docket Number	63049.000092

Sheet 1 of 1

U.S. PATENT DOCUMENTS

*Examiner Initials	Cite No.	DOCUMENT NUMBER Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Figures Appear
el	1	US- 6,437,925	08-20-2002	Nishioka	Chapter 1
el	2	US- 6,464,363	10-15-2002	Nishioka et al.	— —
el	3	US- 6,626,532	09-30-2003	Nishioka et al.	— —
el	4	US- 6,682,195	01-27-2004	Dreher	— —
	5	US-			
	6	US-			
	7	US-			
	8	US-			
	9	US-			
	10	US-			
	11	US-			
	12	US-			
	13	US-			
	14	US-			

FOREIGN PATENT DOCUMENTS

*Examiner Initials	Cite No.	FOREIGN PATENT DOCUMENT		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Figures Appear	TRANSLATION	
		Country Code:	Number - Kind Code (if known)				YES	NO
el	1	WO	03/050472 A1	06-19-2003	Horwitz	Chapter 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
el	2	WO	03/068059 A2	08-21-2003	Lai et al.	— —	<input checked="" type="checkbox"/>	<input type="checkbox"/>
el	3	WO	2004/008189 A1	01-22-2004	Lai et al.	— —	<input checked="" type="checkbox"/>	<input type="checkbox"/>
el	4	WO	2004/015481 A1	02-19-2004	Dreher et al.	— —	<input checked="" type="checkbox"/>	<input type="checkbox"/>
el	5	WO	2004/034095 A2	04-22-2004	Lai	— —	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	7						<input type="checkbox"/>	<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

8/31/04

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Attorney Docket Number	63049.000092

Sheet 1 of 2

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91	1	US- 5,386,308	01-31-1995	Michel et al.	
	2	US-			
	3	US-			
	4	US-			
	5	US-			
	6	US-			
	7	US-			
	8	US-			
	9	US-			
	10	US-			
	11	US-			
	12	US-			
	13	US-			
	14	US-			

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Application Number	10/627828
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First Named Inventor	Ronald D. Blum
Art Unit	2873
Examiner Name	Jordan Marc Schwartz
Attorney Docket Number	63049.000092

Sheet

of

OTHER DOCUMENTS - NON-PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	TRANSLATION	
			YES	NO
<i>JS</i>	1	M. Anderson, "Adaptive Optics: Liquid Crystals Lower the Cost of Adaptive Optics", <u>Laser Focus World</u> , pp. 1-3, December 1999	<input type="checkbox"/>	<input type="checkbox"/>
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Form PTO-1449
(Rev. 8-83)

U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.: 63049.000092

Application No.: 10/627,828

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Applicant: Ronald D. Blum et al.

Filing Date: July 25, 2003

Group: 2873

U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
21	1	Re. 35,691	12/16/97	Theirl et al.	—	—	
21	2	D 298,250	10/25/88	Kildall	—	—	
21	3	D 342,063	12/7/93	Howitt et al.	—	—	
21	4	D 350,342	9/6/94	Sack	—	—	
21	5	2,437,642	3/9/48	Henroteau	—	—	
21	6	2,576,581	11/27/51	Edwards	—	—	
21	7	3,161,718	12/15/64	de Luca	—	—	
21	8	3,245,315	4/12/66	Marks et al.	—	—	
21	9	3,614,215	10/19/71	Mackta	—	—	
21	10	3,738,734	6/12/73	Tait et al.	—	—	
21	11	4,174,156	11/13/79	Glorieux	—	—	
21	12	4,181,408	1/1/80	Senders	—	—	
21	13	4,190,330	2/26/80	Berreman	—	—	

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Form PTO-1449 U.S. Department of Commerce (Rev. 8-83) Patent and Trademark Office		Atty. Docket No.: 63049.000092		Application No.: 10/627,828		
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)						
Applicant: Ronald D. Blum et al.						
Filing Date: July 25, 2003				Group: 2873		
U.S. PATENT DOCUMENTS						
Examiner Initial*	Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
EP	14	4,264,154	Peterson	—	—	
EP	15	4,279,474	Belgorod	—	—	
EP	16	4,300,818	Schachar	—	—	
EP	17	4,373,218	Schachar	—	—	
EP	18	4,395,736	Fraleux	—	—	
EP	19	4,418,990	Gerber	—	—	
EP	20	4,457,585	DuCorday	—	—	
EP	21	4,466,706	Lamothe, II	—	—	
EP	22	4,529,268	Brown	—	—	
EP	23	4,564,267	Nishimoto	—	—	
EP	24	4,572,616	Kowel et al.	—	—	
EP	25	4,577,928	Brown	—	—	
EP	26	4,601,545	Kern	—	—	
EP	27	4,609,824	Munier et al.	—	—	
EP	28	4,712,870	Robinson et al.	—	—	
OP	29	4,756,605	Okada et al.	—	—	
Examiner: <i>[Signature]</i>			Date Considered: <i>8/31/04</i>			
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Group: 2873

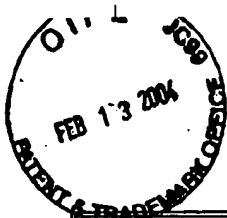
U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
Q	30	4,772,094	9/20/88	Sheiman	—	—	
Q	31	4,795,248	1/3/89	Okada et al.	—	—	
Q	32	4,818,095	4/4/89	Takeuchi	—	—	
Q	33	4,836,652	6/6/89	Oishi et al.	—	—	
Q	34	4,880,300	11/14/89	Payner et al.	—	—	
Q	35	4,904,063	2/27/90	Okada et al.	—	—	
Q	36	4,907,860	3/13/90	Noble	—	—	
Q	37	4,919,520	4/24/90	Okada et al.	—	—	
Q	38	4,927,241	5/22/90	Kuijk	—	—	
Q	39	4,929,865	5/29/90	Blum	—	—	
Q	40	4,930,884	6/5/90	Tichenor et al.	—	—	
Q	41	4,945,242	7/31/90	Berger et al.	—	—	
Q	42	4,952,788	8/28/90	Berger et al.	—	—	
Q	43	4,958,907	9/25/90	Davis	—	—	

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U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
gi	44	4,961,639	10/9/90	Lazarus	—	—	
gi	45	4,968,127	11/6/90	Russell et al.	—	—	
gi	46	4,981,342	1/1/91	Fiala	—	—	
gi	47	4,991,951	2/12/91	Mizuno et al.	—	—	
gi	48	5,015,086	5/14/91	Okaue et al.	—	—	
gi	49	5,030,882	7/9/91	Solero	—	—	
gi	50	5,066,301	11/19/91	Wiley	—	—	
gi	51	5,073,021	12/17/91	Marron	—	—	
gi	52	5,076,665	12/31/91	Petersen	—	—	
gi	53	5,091,801	2/25/92	Ebstein	—	—	
gi	54	5,108,169	4/28/92	Mandell	—	—	
gi	55	5,130,856	7/14/92	Tichenor et al.	—	—	
gi	56	5,142,411	8/25/92	Fiala	—	—	
gi	57	5,171,266	12/15/92	Wiley et al.	—	—	
gi	58	5,182,585	1/26/93	Stoner	—	—	

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INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)							
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U.S. PATENT DOCUMENTS							
Examiner Initial*		Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
Q1	59	5,184,156	2/2/93	Black et al.	—	—	
Q1	60	5,200,859	4/6/93	Payner et al.	—	—	
Q1	61	5,208,688	5/4/93	Ferguson et al.	—	—	
Q1	62	5,229,885	7/20/93	Quaglia	—	—	
Q1	63	5,239,412	8/24/93	Naka et al.	—	—	
Q1	64	5,306,926	4/26/94	Yonemoto	—	—	
Q1	65	5,324,930	6/28/94	Jech, Jr.	—	—	
Q1	66	5,352,886	10/4/94	Kane	—	—	
Q1	67	5,359,444	10/25/94	Piosenka et al.	—	—	
Q1	68	5,375,006	12/20/94	Haas	—	—	
Q1	69	5,382,986	1/17/95	Black et al.	—	—	
Q1	70	5,440,357	8/8/95	Quaglia	—	—	
Q1	71	5,443,506	8/22/95	Gurabet	—	—	
Q1	72	5,451,766	9/19/95	Van Berkel	—	—	
Q1	73	5,488,439	1/30/96	Weltmann	—	—	
Examiner: <i>Q1</i>				Date Considered: <i>8/31/04</i>			
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U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
g	74	5,522,323	6/4/96	Richard	—	—	
g	75	5,608,567	3/4/97	Grupp	—	—	
g	76	5,615,588	4/1/97	Gottschald	—	—	
g	77	5,654,786	8/5/97	Bylander	—	—	
g	78	5,712,721	1/27/98	Large	—	—	
g	79	5,728,155	3/17/98	Anello et al.	—	—	
g	80	5,739,959	4/14/98	Quaglia	—	—	
g	81	5,777,719	7/7/98	Williams et al.	—	—	
g	82	5,815,233	9/29/98	Morokawa et al.	—	—	
g	83	5,861,936	1/19/99	Sorenson	—	—	
g	84	5,900,720	5/4/99	Kallman et al.	—	—	
g	85	5,949,521	9/7/99	Williams et al.	—	—	
g	86	5,980,037	11/9/99	Conway	—	—	
g	87	6,325,508	12/4/01	Decreton et al.	—	—	

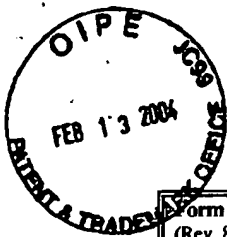
FOREIGN PATENT DOCUMENTS

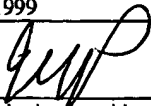
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g	1	WO 98/27863	7/2/98	WIPO	—	—		X
g	2	0 154 962 A2	9/18/85	EPO	—	—		X

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FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	<u>Translation</u> Yes No
41	3	0 233 104 A1	8/19/87	EPO			(Abstract)
41	4	0 237 365 A1	9/16/87	EPO			(Abstract)
41	5	1-237610	9/22/89	Japan			(Abstract)
41	6	2169417A	7/09/86	UK			X
41	7	2170613A	8/6/86	UK			X
41	8	55-076323	6/9/80	Japan			(Abstract)
Examiner Initial*		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
41	1.	"Focusing by Electrical Modulation of Refraction in a Liquid Crystal Cell"; Stephen T. Kowel et al., <i>Applied Optics</i> , Vol. 23, No. 2, January 15, 1984, pp. 278-289					
41	2	"Computer Vision Syndrome - The Eyestrain Epidemic"; Robert A. Davis, O.D., <i>Review of Optometry</i> , September 15, 1997, pp. 80-88					
41	3	"The Use of Yoked Base-Up and Base-In Prism for Reducing Eye Strain at the Computer"; Stuart M. Lazarus, O.D., <i>Journal of the American Optometric Association</i> , April 1996, pp. 204-208					
41	4	<i>Eyecare Business</i> , October 1997 (entire issue)					
41	5	"Vision Through a Liquid-Crystal Spatial Light Modulator"; Larry N. Thibos et al., <i>Inpress</i> , Adaptive Optics Conference, Durham, United Kingdom, 1999					
41	6	"Requirements for Segmented Spatial Light Modulators for Diffraction-Limited Imaging Through Aberrated Eyes"; Larry N. Thibos et al., <i>Inpress</i> , Adaptive Optics Conference, Durham, United Kingdom, 1999					
41	7	"Use of Liquid-Crystal Adaptive-Optics to Alter the Refractive State of the Eye"; Larry N. Thibos et al., <i>Optometry and Vision Science</i> , Vol. 74, No. 7, July 1997					
41	8	"Electronic Spectacles for the 21 st Century", <i>Indiana Journal of Optometry</i> , Vol. 2, No. 1, 1999					
41	9	"Profile: Larry N. Thibos, Ph.D. and Donald Miller, Ph.D.", <i>Indiana Journal of Optometry</i> , Vol. 2, No. 1, pp. 5-10, 1999					
Examiner: 				Date Considered: 8/31/04			
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U.S. PATENT DOCUMENTS

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Q1	1	4,787,733	11/29/88	Silva	—	—	
Q1	2	4,919,520	04/24/90	Okada et al.	—	—	
Q1	3	5,050,981	09/24/91	Roffman	—	—	
Q1	4	5,114,628	05/19/92	Höfer et al.	—	—	
Q1	5	5,682,223	10/28/97	Menezes et al.	—	—	
Q1	6	5,712,721	01/27/98	Large	—	—	
Q1	7	5,815,239	09/29/98	Chapman et al.	—	—	
Q1	8	5,953,098	09/14/99	Lieberman et al.	—	—	
Q1	9	6,086,204	07/11/00	Magnante	—	—	
Q1	10	6,095,651	08/01/00	Williams et al.	—	—	
Q1	11	6,145,987	11/14/00	Baude et al.	—	—	
Q1	12	6,305,802	10/23/01	Roffman et al.	—	—	
Q1	13	6,554,425	04/29/03	Roffman et al.	—	—	

Examiner: <i>gyp</i>	Date Considered: <i>8/31/04</i>
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		Filing Date: July 25, 2003	Group: 2873

U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
al	14	6,609,794	08/26/03	Levine	—	—	
al	15	6,616,275	09/09/03	Dick et al.	—	—	
al	16	6,616,279	09/09/03	Davis et al.	—	—	
al	17	6,631,001	10/07/03	Kuiseko	—	—	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes No
1	10366043	12/09/98	JP	—	—	X
2	PCT/US91/04976	07/15/91	PCT	—	—	
3	PCT/US97/21688	11/21/97	PCT	—	—	
Examiner: <i>[Signature]</i>			Date Considered: <i>8/31/04</i>			
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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No

Examiner
Initial***OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

1	"Control Optimization of Spherical Modal Liquid Crystal Lenses"; A. F. Naumov and G. D. Love, <i>Optics Express</i> , Vol. 4, No. 9, April 26, 1999, pp. 344-352
2	"Liquid Crystal Adaptive Lenses with Modal Control"; A. F. Naumov and M. Yu Loktev, <i>Optics Letters</i> , Vol. 23, No. 13, July 1, 1998, pp. 992-994
3	"Liquid Lenses Eye Commercial Breakthrough" (Internet Article under "Optics.org"); from <i>Opto & Laser</i> , November 2003

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